

November 1999

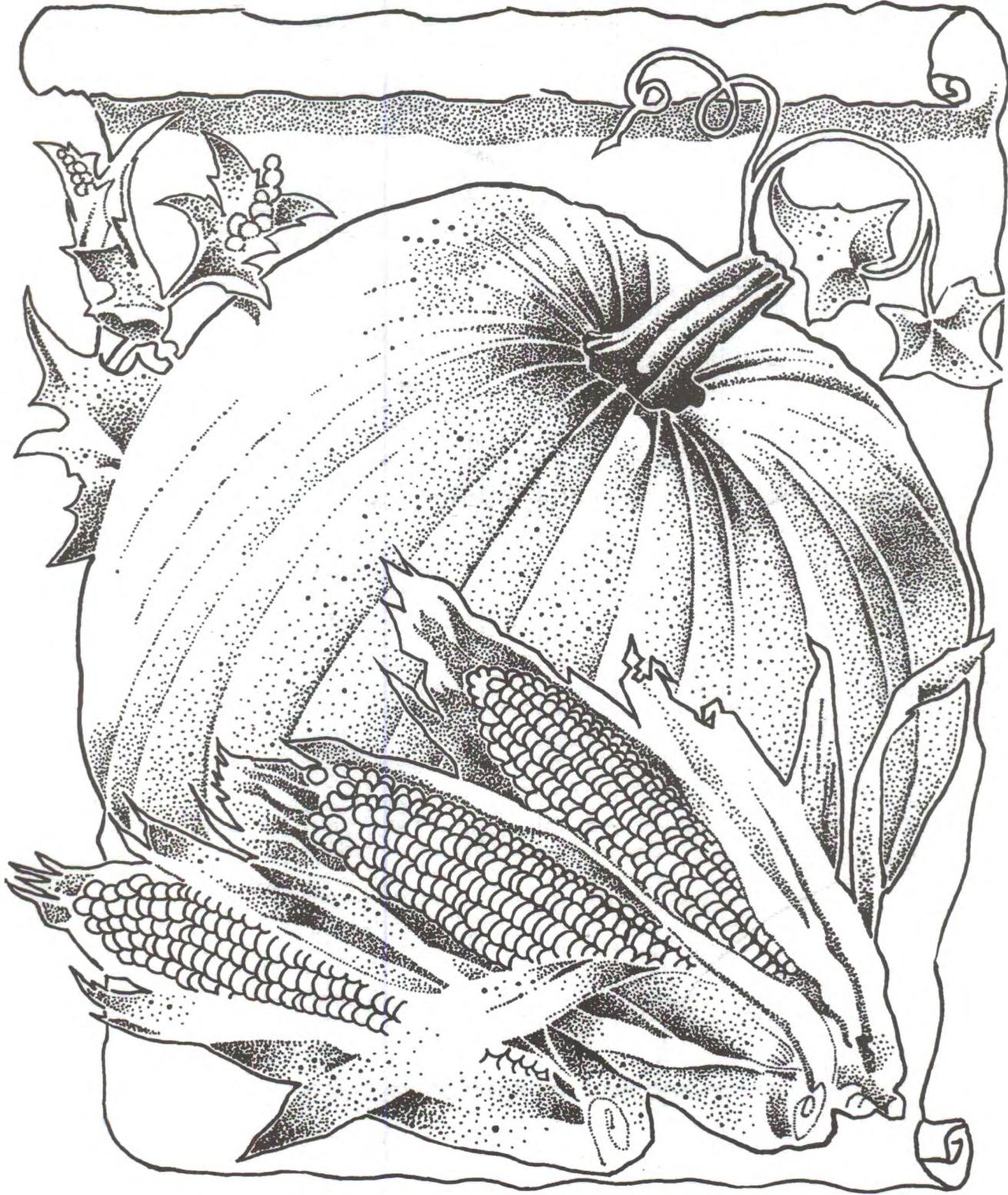
Vol 6 No 11

extended attributes

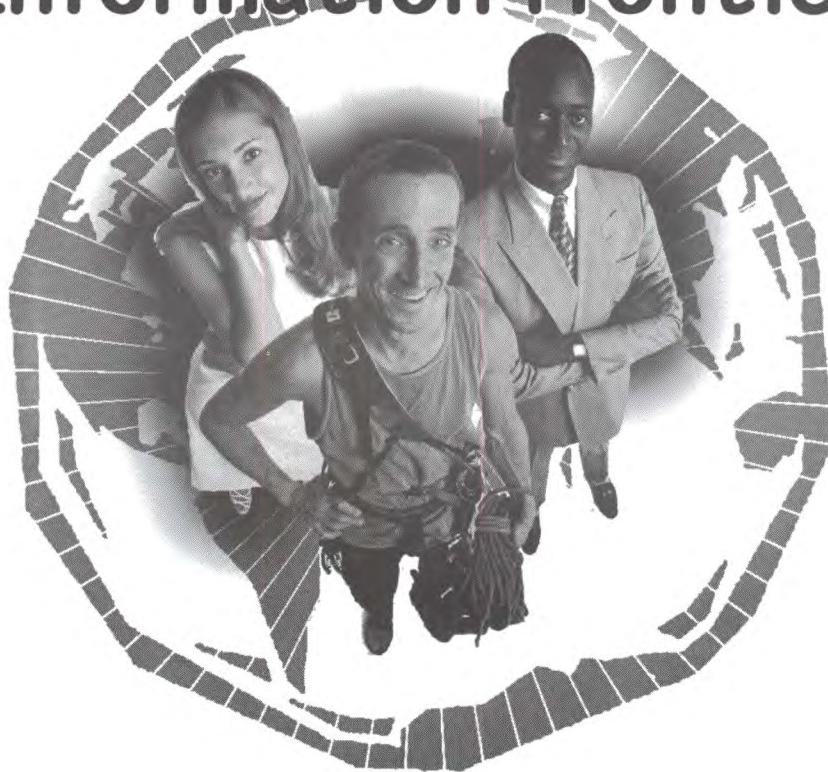
The magazine of the OS/2 community



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Repeating history repeating itself

Comment

by Bill Schindler, Editor-in-chief

There's an old saying that history repeats itself....

Nearly every OS/2 user I talk to agrees that things have been better. (Some even go so far as to call the flash of excitement surround OS/2 2.1 and Warp 3 the "good old days.") But even though these aren't the best of times for OS/2 users, there was a time when it was worse.

Most OS/2 users came into the fold after OS/2 2.0 was released. From comments occasionally made in the online lists, I'd guess that the majority of users started using OS/2 with Warp 3.

That means that most OS/2 users aren't familiar with OS/2's early history.

Before OS/2 1.0 was released, and for a while after its release, several of the magazines went OS/2 crazy. It became common to see letters in the magazines complaining about the enthusiastic coverage.

For a variety of reasons, OS/2 1.0 wasn't the instant success that many in the press had thought it would be. It lacked a lot of key features (like printing), and its DOS program support quickly became known as the "DOS penalty box."

By the time OS/2 1.2 was released—with PM and HPFS and a mostly-useable DOS compatibility box—the press had concluded that OS/2 had failed to live up to its (their?) hype. A couple of notable applications were ported to OS/2, but it wasn't enough to make it a landslide choice.

When OS/2 1.3 shipped, the press hardly took notice. Neither IBM nor Microsoft made much of a big deal over 1.3 shipping. (Remember that OS/2 was originally Microsoft OS/2?)

If you want to see a truly bleak time in the history of OS/2, go back and look at the OS/2 1.3 days. Its primary parent—Microsoft—was more interested in striking out in other directions than in supporting OS/2. There were a handful of applications, mostly priced higher than the same applications on competing platforms. The OS/2 user community had dwindled to a core group made up mostly of stalwart techies and corporate users. (And a large contingent of ATMs.) In fact, IBM even once publicly claimed 350,000 users for OS/2 1.3.

In spite of their small numbers and a bleak view of the future, that core set of users didn't give up. They had a solid operating system that fulfilled most of their needs.

It would have been nice if there were more applications. It would have been nice if OS/2's creators weren't feuding. But OS/2 worked well as it was. So those users stuck with it.

IBM and Microsoft split. IBM turned 180 degrees and produced a new version of OS/2—OS/2 2.0. IBM even apologized to OS/2 users for abandoning them.

In nearly every OS/2 demo he gave, David Barnes said that individual OS/2 users were the reason that OS/2 continued to exist.

There's an old saying that history repeats itself.... ☺

Phoenix OS/2 Society, Inc

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Blueprint Software Works acquires PMMail

press release

Blueprint Software Works, Inc., a newly formed software development and publishing firm, has acquired the PMMail software package from Southsoft, Inc. An updated version of PMMail is also released.

PMMail is a powerful and flexible email application that provides extensive support for emerging Internet standards, along with a user-friendly interface. PMMail is a multi-platform application supporting OS/2 as well as Windows NT/95/2000. PMMail offers users a way to manage unlimited email accounts, providing a cost-effective, time-saving communication tool.

"We are excited about the acquisition of the PMMail product line. Southsoft has developed an email application that is in a class by itself," said Thomas Bradford, President, Blueprint Software Works. "The PMMail feature set is packed with everything a customer needs to manage email and the interface is displayed in a logical and intuitive manner. The program is designed for easy navigation, setting PMMail apart from other email programs."

"We created PMMail over four years ago," said Robert Novitskey, lead developer and President of Southsoft, Inc. "Yet, even today, no product has come close to PMMail's power and feature set."

"In the past six months, it became apparent that Southsoft could no longer provide the level of quality in service, support, breadth of features and timeliness of upgrades that our customers deserve," said Novitskey. "As such, we searched far and wide to find someone to take over the reins and continue in the tradition that we have set forth. We are pleased to have found a partner (in Blueprint Software Works) who shares the same desire to see PMMail continue to grow and astonish customers. The latest OS/2 version (2.10) is available on Hobbes or at www.blueprint-softwareworks.com.

Blueprint Software Works is a privately held firm located in Wilmington, NC specializing in software development, as well as publishing and marketing services for independent developers. The acquisition and launch of PMMail announces Blueprint Software Works' official entrance into the software development and publishing market. Negotiations with other leading developers in the Internet and multimedia market are under way. ☀

Junk Spy ready for OS/2 action

press release

Sundial Systems' Junk Spy is ready for download.

"It's a free prerelease version," says Randell Flint of Sundial. "We're finished with our internal testing, and now we want everyone to give it a try. Go straight to the Junk Spy page and get yourself a copy."

Junk Spy installs between your email program and your mail server, where it watches for, and filters out, junk mail.

"This is a hands-off answer to everyone's junk mail problem" adds Rollin White, Junk Spy's Development Manager. "Here at Sundial we constantly analyze new junk mail and we also continuously update a database of known spammer sites. We do all of the logic enhancements and database updates so Junk Spy is always current."

You can get a prerelease version of Junk Spy at www.sundialsystems.com/junkspy.

"Junk Spy's logic engine lets us do much more than an end-user can with filters, since a mail program's filters can't access a database of clues or do extensive logic" says Randell Flint. "And because Junk Spy does all the checking based on Sundial's constant flow of database updates and detection clues, there's no need for a user to create filters and then keep them updated."

Junk Spy makes email more productive since you don't waste time cleaning trash messages from your inbox. ☀

The software orphanage

by Esther Schindler

Picture this. You visit Hobbes, or the OS/2 Central Forum on CompuServe. You download a shareware OS/2 utility or a demo application that seems to provide just the functionality you want, and you install it on your computer. The shareware version limits the functionality in some way—perhaps you can't print—or the demo expires in 60 days. That's okay; you're able to explore the software within those limitations, and you discover that it does, indeed, do everything you'd hoped for. You're ready to register the shareware, or buy the shrinkwrap product direct from the vendor. And that's when you run into trouble.

Return to sender

When you try to contact the author, the email address bounces. The Web site doesn't seem to exist anymore. Or you do reach the software vendor, but the company says it no longer supports the OS/2 version—the demo you downloaded was three years old—so they won't take your money and they certainly won't support the program. Essentially, the application is abandoned.

What are your options? If you're lucky, you can find a competing product that provides similar functionality, produced by a company that's still supporting and enhancing their applications. But if Foo/2 is the only OS/2 program that lets you create flowcharts, and creating flowcharts is something you desperately need to do, then you're stuck. Ordinarily, you'd never consider pirating software—but in this case, if you can find a registration number under a rock someplace, is it really wrong to use it? You're well aware that hacking an application to remove a time limitation is a violation of intellectual property laws, but if you want to use the program it seems to be the only way to accomplish it. You're willing to pay for the application, but what can you do?

This isn't a problem limited to OS/2 users. Every platform has shareware authors who lose interest or move away, and software development companies close all the time. We OS/2 users just have a bad case of the phenomenon. We have fewer alternatives to choose from, because so few new applications are released for our operating system, and many companies are turning to other platforms.

Whose baby is this?

From a legal point of view, you have no right to software even if it's completely abandoned. The intellectual property belongs to the author, even if the author is missing, dead, or disinterested. I've seen some OS/2 users present understandably passionate but legally incorrect demands that a software author who is abandoning a product some-

how "owes" it to the computing community to publish the source code or at least make the application available for free. (That does happen, but it's rare.) I've even seen it said that a programmer has a moral requirement (which ought to be legal) to support an application for ten years.

This is an attitude generally expressed by people who have never needed to make a living as an entrepreneur. The people who utter such things rarely contemplate that programmers reuse source code in many projects. Even if the application author would be happy to share the ability to perform a task (say, sort forum messages quickly), the skill of writing, say, an efficient parser isn't something that the programmer wants to give away. The ability and skill of writing such things is a programmer's only stock in trade.

Sometimes, a product merely appears to be abandoned. We've certainly all read message posts asking "has anybody been able to find the author of Foo/2?" People switch ISPs and thus email IDs, and there's no equivalent for Ma Bell's "the number you dialed has been changed" message. The email ID supplied in that three-year-old demo might be wrong, but a new one may exist. Or the author may have tried to contact all his registered users, and it was your email address that had changed, so he couldn't reach you.

Baby on the doorstep

Is it feasible to set up a site as a shareware orphanage, a clearinghouse which would bring OS/2 users up to date on the status of lost applications, where shareware authors can (by their decision or after being contacted by an uninvolved third party) drop their unwanted babies on the digital doorstep? Could part of that service optionally include a source code service... or maybe a matchmaking service wherein the original author permits another programmer to take over the software's ownership and maintenance?

I'm interested in what could be effectively accomplished in this area. I'd like to hear some input on what you would expect of such a shareware orphanage. Is it something you'd expect to subscribe to? (I would expect something that would need to cover the cost of phone calls to track down the shareware authors, for instance.) Would you consider it as a benefit of membership in, say, an OS/2 user group? What do you think the components of such a site—and an undertaking—might be?

Among the roles that such an orphanage could play are:

- To act as a "locator service" for tracking developers
- Act as a repository for orphaned shareware
- Be a "matching service" to pair orphaned applications with programmers willing to continue the development

and support

But there's quite a few more possibilities.

In such a venture, there would need to be several classifications of abandonment. At the simplest is a listing of applications with untraceable authors: nobody's been able to reach the software developer to hand her a check, and users are encouraged to contact an orphanage representative if they know that, say, Jane Author is reachable at Jane@foo.com, these days. If the orphanage can find the author, it might be possible to get her to release the software as a free application, and issue a universal registration key, leaving the application unsupported but at least usable (i.e. anybody can print) while retaining the copyright. In some cases, it might be possible to encourage the author to release the source code, so that when FixPack 75 comes out and breaks the printing features, someone can step in and fix the application. (Or, even better, the author may realize that plenty of people want to buy her application, and she will begin to both collect registration checks and to further enhance the product. We'd all be happy to see a program leave the list of abandoned applications.)

But if the author can't be contacted what can one legally do with the abandoned shareware? Is there a software equivalent to auto salvage for an abandoned car, whereupon someone else can acquire ownership—or at least the ability to disseminate a copy of the registration code?

Contacting the authors would require a fair bit of work, especially for older software that was distributed before the Internet became commonplace. This isn't an easy job, and it may not be a cheap one. For a project like this to move forward, lawyers would need to get involved. Who'll bear the costs, and who gets the benefits of the results?

This idea raises more questions than it does answers. I'd like to hear what you think of it. ☺



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Peerless network printing

by Julian Thomas

feature

Our house has two desktop computers, plus a Thinkpad, running OS/2 Warp. A few years ago, when a remodelling project offered me the opportunity to run coax through a wall, I set up a network for our home systems using TCP/IP. (Somehow I never got around to trying to install peer networking.)

The main benefit of our home network is that both of us—me and my wife Mary Jane—can access the Internet (using InJoy's IP masquerading facility and the modem on my machine). But, until recently, printing from the remote machine was a manual operation, and we have only one printer in the house. Printing either involved sneakernet, or we used FTP to transfer a file to my machine, from where it could be printed.

Using LPR

Then I discovered LPRMON.EXE. LPRMON works in conjunction with LPD.EXE (originally 'Line Printer Daemon' with roots in Unix). It allows me to define a printer object on the remote machine (HP LaserJet 4P on LPT2:). LPRMON can intercept all LPT2: output and redirect it over the network to the computer that is acting as a print server. Now, Mary Jane can holler downstairs to me, telling me to turn on the printer, so she can print away.

Let's examine how this works.

First of all, both machines need to be running TCP/IP. I firmly believe that all networks should include this protocol; when I suspect network problems, my first action is to issue a PING from one machine to the other. However, you need to keep a few things in mind when setting up a TCP/IP network.

You need to assign each machine an IP address; these should be from one of the domains reserved for private networks. I use 192.168.x.y where x and y are your choice of integers. x should be the same for all machines; y should be unique and must be in the range 1-254.

You should assign each system a name. For obscure reasons, my machine is MOHOTTA; her machine is MARYJANE. A third machine, JTREDHAT, is running Linux.

Now create a HOSTS file in whatever directory the ETC environment variable points to. On my machine, it's C:\ETC but the TCP/IP default is usually either C:\TCP\IP\ETC or C:\MPTN\ETC. You'll use the same HOSTS file on each computer. Mine looks like this:

```
192.168.128.1 mohotta      #
192.168.128.2 maryjane     #
192.168.128.3 jtredhat      #
127.0.0.1   localhost      #
```

CONFIG.SYS should include the following entries. Use the local machine name in the HOSTNAME line.

```
SET HOSTNAME=mohotta
SET USE_HOSTS_FIRST=1
```

If this works, you should be able to PING by name from one machine to another. TCP/IP commands are not documented in the regular OS/2 help system, but you can run TCPHELP from a command line to access its help files.

Setting up the printer

Next, we need to set up the printer facilities. On the machine with the printer, we need to run LPD.EXE. I have the following CMD file in my startup folder:

```
c:\tcpip\bin\lpd -b -c
```

The flags suppress printing of a banner page and of the control file.

On the remote machine, we need to install the same printer that's on the server as LPT2:. In my case, that's a HP LaserJet 4P. We also need to start the LPRMON daemon; here, LPRMON.EXE itself is in the startup folder with the following flags:

```
lprmon.exe -b -p HPLaserJ -s mohotta lpt2
```

- -b indicates binary date (needed since we are printing HPCL, not text).
 - -p identifies the printer on the server
 - -s identifies the server
 - lpt2 is the local printer port that is being redirected.
- Most of Mary Jane's printing is from WordPerfect 6.0 for DOS. Fortunately, LPRMON works the same whether the print comes from a DOS VDM or from a native OS/2 application.

If you are only interested in printing text from a command line, you don't need LPRMON. In that case, you can use LPR.EXE on the remote machine, with the -p and -s flags along with the filename. ☺

Julian Thomas is a retired IBM engineer and programmer who uses OS/2 for almost everything and is a member of the POSSI board of directors. He, his wife Mary Jane, and Matinicus (a red Maine Coon cat) live in the beautiful Finger Lakes Wine Country of New York State.

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The undocumented OS/2 firewall

by John Sandercock, jsanderc@american-club.net

feature

A few years ago, IBM ported to OS/2 a 32-bit TCP/IP stack which it originally developed for AIX, its own flavor of Unix. This stack is commonly known as TCP/IP 4.1, to distinguish it from the 16-bit TCP/IP stack, known as 4.0, which ships with OS/2 Warp 4. If you have kept up with the Warp 4 FixPacks, your system probably reports that TCP/IP is at version 4.02w.

IBM neglected to tell OS/2 users that TCP/IP 4.1 included a firewall, but somehow the word got out. Knowing about the firewall and being able to use it are two different things, however. Thanks to Vit Timchisin, who first made some of this information available on the Web, and to Eirik Overby, who has written Zampa, an utility interface to the firewall, OS/2 users now have access to some of IBM's powerful Internet security tools.

Software Choice

To get TCP/IP 4.1, you have to subscribe to IBM Software Choice. You get Software Choice through an authorized IBM representative, such as Indelible Blue, from whom a two-year subscription costs \$209. Additional subscriptions cost \$125. You can't order this service online from IBM, and it is not clear what additional software IBM will offer subscribers through this program. IBM has announced, however, that effective January 1, 2000, the option to download future features and updates from Software Choice will only be available to customers who purchase a subscription to Software Choice or Passport Advantage.

If you have not kept up with FixPacks and the Netscape and Java upgrades, you have a bit of work to do before installing TCP/IP 4.1. You need Java 1.1, which requires that you have Feature Installer, which requires that you have Netscape 4.04 or higher, which requires FixPack 29 (for OS/2 Warp 3) or Fixpack 6 (for OS/2 Warp 4). Whew!

If you have not updated your system to this level, one of the easiest ways to do it is to order the Warp Up CD from Indelible Blue. It costs about \$30 for the server edition, and an added benefit is that it includes updates to the MPTS and TCP/IP stack, which come with Software Choice.

The folks at Indelible Blue, who provide a lot of advice on upgrading OS/2 Warp 4, do not recommend TCP/IP 4.1 for most users. If you do not need the firewall, and you are not running a server on the Internet, think hard before you go to all this trouble. The 16-bit stack is very robust.

After you subscribe to Software Choice, you will receive a CD with a 24 MB file called TCP41.ZIP. It unzips into two directories, MPTS and TCPIP. Install MPTS first. Then, when you install TCPIP, choose the VPN service along with the base pack. Doing so will automatically install the files

you need to run the firewall and will make the necessary changes to your CONFIG.SYS. The TCP/IP 4.1 installation preserves all your settings, except the user rights and passwords.

The configuration notebook for TCP/IP 4.1 runs on Java. Unfortunately, it is dog slow and a RAM hog. It didn't bother me too much on my Pentium-based desktop, but it took a very long time to load on the older machine I use as a Web server.

TCP/IP 4.1 comes with two configuration objects, one for local use and one for remote use. While the remote configuration object requires a password, the installation routine does not require you to specify a password. Local configuration does not require a password, but you may have trouble finding the right object. The installation on my Warp 4 machine reversed the local and remote objects. If the local object asks for a password, choose the remote object instead. Or, change to \TCPIP\BIN on the drive with the installation, and type TCPFCFG2R to get the local configuration notebook. (The objects set themselves up correctly under Warp Server.)

The firewall

As I said, the firewall is undocumented. You can read about the AIX firewall at www.computerps.com/internet/security/firewalls/books/v32/en_US/AIX/fwuser.html, but you'll find nothing about its implementation under OS/2.

Nevertheless, it really works. It works especially well with the help of Eirik Overby's utility, which he now calls Zampa, to set up the packet filtering. Eirik originally called his software The Wall, but he changed the name, probably to avoid confusion with The Wall from Pretty Pop Software, which is desktop wallpaper.

Zampa is extraordinarily easy to set up, once you have TCP/IP 4.1 with VPN support installed. Download zampa099.zip (the latest beta) from www.mo.himolde.no/~1tnring/os2, unzip it, make sure you have VROBJ.DLL in a directory in your LIBPATH statement, and run ZAMPA.EXE. You will get a very tidy little PM window with lots of push buttons and radio buttons and check boxes.

Click on the push button labelled "Start firewall." You will find that none of your TCP/IP applications will work. By default, all packets going into and out of your machine will be blocked. Click on "Stop firewall," and everything will return to normal. For the moment, stay away from the "Write config" push button.

How do you set up the firewall so that you can still use the Internet? You have to establish rules for your firewall,

and to do that, you need to know something about packet filtering.

Packet filtering

If you dial up to the Internet with a modem, and your machine is not connected to a LAN, you probably don't need packet filtering. Your machine is not likely to be connected to the Internet long enough to be a target for attackers, and it will not have a static IP address in any event. Packet filtering will be more annoying than helpful because it will be troublesome to maintain and it might have some impact on performance.

If you have a permanent connection to an ISP through a router or a LAN, you may already have packet filtering, because most routers come with this capability. Your ISP may even have set up the filters for you.

So who needs additional packet filtering courtesy of OS/2?

- OS/2 users with cable modem connections who want additional security
- OS/2 users with LAN access to the Internet, who want more protection for their machine than what they get from the packet filters on the LAN
- OS/2 users who want to implement personal or interdepartmental security on an intranet; and
- OS/2 webmasters running Web servers on OS/2.

Packet filtering is not simple to set up. You need some knowledge of the mechanics of TCP/IP, because you first have to determine which services you want to enable and which services to disable, and then you have to translate that general policy into specific packet filtering rules for the firewall

to follow.

Most TCP/IP services are bidirectional, which means that you have to set up two rules (one for inbound packets and the other for outbound packets) in Zampa for each service you want to allow through the firewall. In order to set up those rules, you need to know which ports and which protocols are used for each of the services. You also have to arrange the rules in the right order to achieve the result you want. Fortunately, Zampa makes it easy to do that.

a go at your machine, which I don't intend to do.

Having said that, I can say that Zampa appears to do everything a packet filter should do, according to the experts. It allows simple specification of rules. ("Simple" is a relative term, but Zampa is certainly easier to configure than a router.) It allows rules based on any header criteria, including source and destination address, IP options, protocols, such as TCP, UDP, or ICMP, source and destination port, ICMP

What is a firewall?

Firewalls permit one-way access to the Internet. They're used to prevent unauthorized access to a network. That may be a company's local area network, a corporate wide-area network, or just an ISP who wants to prevent unauthorized access to customer files.

The firewall's role is to ensure that all communication between an organization's network and the Internet conforms to the organization's policies -- in both directions.

I had to read the chapter on packet filtering in Chapman and Zwicky, *Building Internet Firewalls* (O'Reilly, 1995) before I even knew where to begin. General books on TCP/IP, even excellent ones such as Loshin, *TCP/IP Clearly Explained* (Morgan Kaufmann, 3d ed. 1999) are not specific enough on this subject, and the README which Eirik Overby provides with Zampa assumes that you know how to set up packet filters. A FAQ at www.interhack.net/pubs/fwfaq contains useful information about firewalls, and IBM's AIX documentation, mentioned above, is helpful, but it, too, assumes a lot of knowledge about TCP/IP.

By the way, firewalls are very hard to test, unless you invite the bad guys to have

message type, and start of connection (ACK bit) information for TCP packets. It applies rules in the order specified. It applies rules separately to incoming and outgoing packets, on a per-interface basis. These rules will definitely keep packets from entering or leaving your machine, so take care to set them up correctly. Fortunately, you can always stop the firewall, delete all the rules, and start over.

Eirik Overby warns everyone that Zampa is in beta, and that IBM is probably not going to provide any support for this firewall. He also says that his software is not free, and that you should contact him at 1tning@mo.himolde.no for a site license if you are going to use the software commercially. ☺

WarpTech registration opens

Sign up now to get the "early bird" discount rates

• *Early*

The Phoenix OS/2 Society, Inc is creating a special three-day technical event for OS/2 Warp users, developers, and vendors. The event will be held at the world-renowned Wigwam Resort in Litchfield Park, Arizona, USA (near Phoenix) over Memorial Day weekend.

Technical sessions are planned to cover the gamut from home to corporate users and from novices to software developers. Among the sessions you can expect:

- Software development
- The Internet and e-business with OS/2
- The guts of OS/2
- Connectivity and cross-platform issues

- The OS/2 marketplace
- Tips and tricks

And more!

If you're an OS/2 user, developer, or vendor, this is an event you do not want to miss! To sign up, cut out or copy the form below, fill it in, and mail it to the Phoenix OS/2 Society with your check or credit card information.

The Wigwam Resort is offering a discount room rate of \$99/night for WarpTech attendees. To reserve your room at this rate, call 800-327-0396 and mention WarpTech. ☎

WARP Tech

Memorial Day May 26-28, 2000
WarpTech
Registration
Wigwam Resort | Phoenix, AZ

Today's date

Name [Last, First I. (Nickname)]

Address 1

Address 2

City

State/province

Zip code/postal code

Country

Phone

Email

Rates for full three days (includes lunches)

Until 31 December 1999: \$110.00 POSSI member \$120.00 nonmember

1 January to 30 April 2000: \$120.00 POSSI member \$130.00 nonmember

1 May 2000 to event: \$130.00 POSSI member \$140.00 nonmember

Daily rates (includes lunches) Friday Saturday Sunday

Until 31 December 1999: \$59.00 one day \$79.00 two days

1 January to 30 April 2000: \$69.00 one day \$89.00 two days

1 May 2000 to event: \$79.00 one day \$99.00 two days

Lunch only (\$25.00) Friday Saturday Sunday

Member #

I am a member of the Phoenix OS/2 Society

I wish to join the Phoenix OS/2 Society now and take advantage of the member discount (enclose a completed membership application)

I need vegetarian meals

Do not send me WarpTech announcements via email

I am interested in information about evening activities and excursions around Phoenix

Please contact me about exhibiting at WarpTech

Please contact me about volunteering to help at WarpTech

Please contact me about advertising

Check enclosed for \$ _____ OR Charge my VISA Mastercard Discover American Express
Make payable to Phoenix OS/2 Society, Inc

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Phoenix OS/2 Society, Inc ■ 5515 N 7th St, PMB 5-133 ■ Phoenix, AZ 85014-2531 ■ USA

Please use one form per registrant

Lexmark struts its stuff

You'll see the new printers at the next general meeting

by Esther Schindler

A few companies can be relied on to provide OS/2 drivers for nearly every hardware peripheral they sell, and in some hardware categories, the drivers are uniformly of top-notch quality. When it comes to printers, the company name that comes to mind first is Lexmark.

Lexmark makes business class and consumer class printers, as well as management software to control printers over the network. In almost every case, the printer comes with an OS/2 driver in the box—you don't even have to search a Web site to find the files. The hardest part of dealing with Lexmark is figuring out which printer to buy.

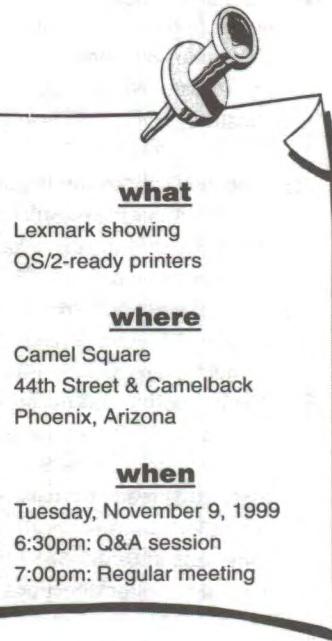
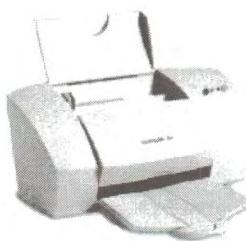
And at our November meeting, we'll get some help with that process. The local sales representative has promised to come to the Phoenix OS/2 Society general meeting on Tuesday, November 9, to present the latest lineup of the company's products. He'll help us understand how much bang you get for your buck, and to learn how much banging you need in the first place.

For example, the Lexmark Z51 Color Jetprinter delivers the highest resolution in its category (1200 x 1200 dpi), the fastest print speeds in its class (up to 10 ppm in black text and 5 ppm in color), and features Lexmark's exclusive Accu-Feed system for virtually jam-proof feeding of all types of media. It also boasts a new microscopic ink drop technology that achieves remarkable photo quality output even on copy grade paper. The Lexmark Z51 has a list price of an affordable \$279.

The business class Lexmark Optra S 1255 is an affordable, high-resolution laser printer with versatile paper handling options. Its 67MHz RISC processor ensures rapid performance and keeps print jobs flowing. It prints true 1200 x 1200 dpi resolution, and its standard PostScript



Level 2 and PCL XL emulations ensure compatibility with most software packages. Standard RAMSmart advanced memory management prints most jobs using less memory. Flexible paper handling options allow you to feed up to five different types of



media. The list price starts at \$999. And OS/2 drivers? Of course!

When and where

The meeting will be held at our new meeting site, at Camelsquare. If you haven't been there yet, give yourself a few extra minutes to find the place. Camelsquare is on the northwest corner of 44th Street and Camelback, in Building G, room G250.

The meeting day and time doesn't change. We're still meeting on the second Tuesday of the month. The general Q&A session begins at 6:30pm. The regular meeting begins at 7:00pm.

Last month, after the Web Server Shootout (or wounding) we decided to return to our old after-meeting haunt, Coyote Springs. We were shocked to learn that it had recently closed! The search for a new after-meeting meeting site continues. ☺

Coming events

history

A list of events scheduled by the Phoenix OS/2 Society and other OS/2 user groups.

November 1999

- 2** net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm.
 Coordinator Mike Briggs.
 Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

- 5** Magazine submission deadline for December issue. Articles should be sent to editor@possi.org. For other arrangements, call 480-585-5852.

- 9** General meeting; Lexmark. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Camel Square, G250, 44th St & Camelback, Phoenix.

- 27** Board meeting and magazine prep. Meeting is 10:00am to 1:00pm. Eat a brunch, learn about the inner workings of the Society, and help get extended attributes ready to mail. Location: Bill and Esther Schindler's house in north Scottsdale, 9355 E Mark Lane. Call 480-585-5852 or send email to esther@bitranch.com for directions.

December 1999

- 5** Magazine submission deadline for January issue. Articles should be sent to editor@possi.org. For other arrangements, call 480-585-5852.

- 7** net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm.
 Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

- 14** General meeting; IBM DB2 (tentative). Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Camel Square, G250, 44th St & Camelback, Phoenix.

- 26** Board meeting and magazine prep.

January 2000

- 4** net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm.
 Coordinator Mike Briggs.
 Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

- 5** Magazine submission deadline for February issue. Articles should be sent to editor@possi.org. For other arrangements, call 480-585-5852.

November

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

- 11** General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Camel Square, G250, 44th St & Camelback, Phoenix.

- 22** Board meeting and magazine prep.

February 2000

- 1** net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm.

Coordinator Mike Briggs.

Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

February

S	M	T	W	T	F	S
	1	2	3	4	5	
6	7	8	9	10	11	
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29				

- 5** Magazine submission deadline for March issue. Articles should be sent to editor@possi.org. For other arrangements, call 480-585-5852.

- 8** General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Camel Square, G250, 44th St & Camelback, Phoenix.

- 26** Board meeting and magazine prep.

March 2000

- 5** Magazine submission deadline for April issue. Articles should be sent to editor@possi.org. For other arrangements, call 480-585-5852.

March

S	M	T	W	T	F	S
	1	2	3	4		
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- 7** net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm.

Coordinator Mike Briggs.

Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

- 14** General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Camel Square, G250, 44th St & Camelback, Phoenix.

- 25** Board meeting and magazine prep.

April 2000

- 4** net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm.

Coordinator Mike Briggs.

Location: KDC, 2999 N 44th St, 4th floor, Phoenix.

April

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

- 5** Magazine submission deadline for May issue. Articles should be sent to editor@possi.org. For other arrangements, call 480-585-5852.

- 11** General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Camel Square, G250, 44th St & Camelback, Phoenix.

- 22** Board meeting and magazine prep.

Meeting locations

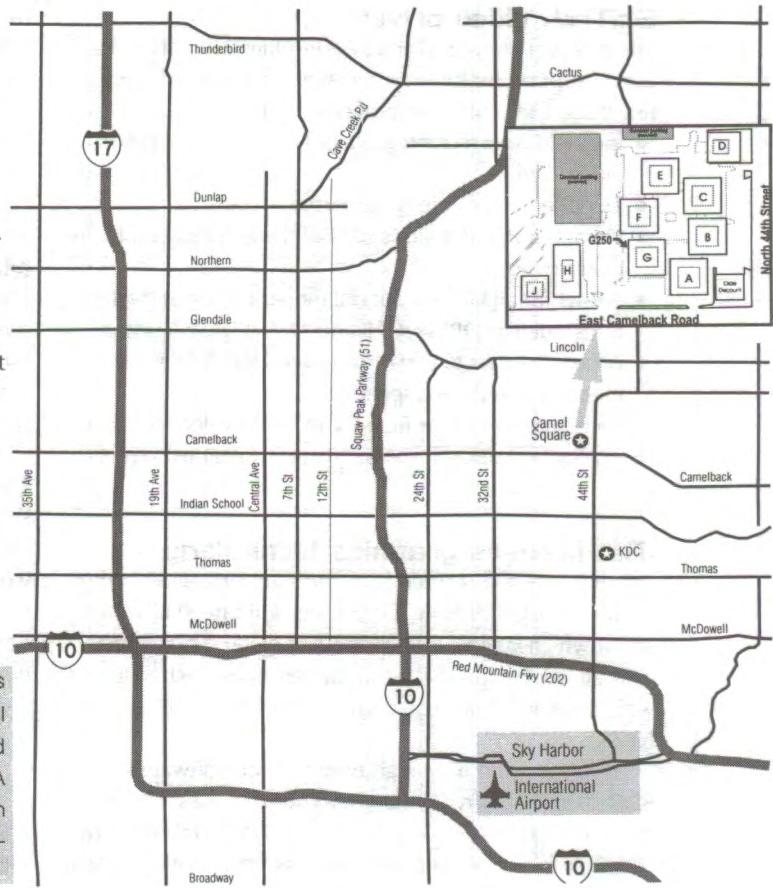
Directions to meeting locations.

General meetings are held at the Camel Square office complex, Room G250, 44th Street and Camelback (northwest corner), Phoenix.

From the Red Mountain Freeway (202), exit at 44th Street and go north $3\frac{1}{2}$ miles. From the Squaw Peak (51), exit at Colter (southbound) or Highland (northbound); follow signs to Camelback Rd and go east $3\frac{1}{2}$ miles.

The "How OS/2 Works General Interest Group" and the Internet SIG (net.sig) meet at Knowledge Development Center, 2999 N 44th St, Suite 400. That's just north of Thomas, in the building with the green dome. Plenty of free parking is available in the garage behind the building. ☺

If the mailing label on the back cover says "sample" then this may be the only copy of extended attributes that you will ever receive. If you want to keep getting the magazine (and receive all the other benefits of membership), you must join! A 12 month membership in the USA is only \$30. (See the form for membership pricing in other areas.) Tear out the application, fill it in, and mail it with your membership fee today!



A map of Camel Square, the new location for the Society's monthly general meeting. We will be meeting in room G250. You may park anywhere except in the reserved (covered) parking spaces.

In the driver seat

New support for your OS/2 hardware

by David Wei, davidwei@cybermail.net



SciTech video driver

The newest beta of SciTech's All-In-One video driver has added support for more video chipsets, and fixed quite a few bugs. Some of the improvements include:

- It should now support practically every legacy ISA/VLB video card.
- Extended text mode is supported.
- Detects a PnP monitor's capabilities and lists usable display modes.
- Allows for all kinds of special monitor setup and features, such as DPMS, GTF and 16:9 display modes.
- Allows the user to tweak and overclock their display memory to enhance speed.

SciTech Display Doctor Beta 7 can be downloaded from <ftp://ftp.scitechsoft.com/sdd/beta/os2/sdd-os2-7.0.0-b7.zip>.

IBM licenses graphics technology

IBM has licensed SciTech Software's universal video driver for use with OS/2! Now, OS/2 users don't need to worry about which video card has an OS/2 driver. Soon, practically all video cards will be supported by SciTech Software's SDD/2. That should save a lot of time, money, and hassle.

For those who have registered SciTech Software's SDD/2, don't worry. The money you paid does not go down the drain. IBM only licensed a "Limited Edition" of SDD/2, which does not have as many features as the registered version. For example, the resolution setting in the registered version is quite flexible—just about anything you want. With IBM's version, the resolution is limited to a few preset values. Other more specialized features are also excluded from the "Limited Edition." I registered SDD/2 early on, and I do not regret it at all!

At press time, the press release was not yet on SciTech Software's site at www.scitechsoft.com.

Actiontec Electronics

Thanks to Armin Schwarz for calling my attention to Actiontec's modems. Actiontec Electronics' Internal Call Waiting Modem comes bundled with an OS/2 device driver. For anyone looking for an internal PCI modem, this might be a good choice. But please note that not all Actiontec modems support OS/2.

Info is available at www.actiontec.com

PMCDRec beta 0.02

PMCDRec is another CDRecord/2 and Mklisofs front end. Instead of only creating audio CDs, this program should

help you produce data CDs as well. Since the program is at an early stage of development, it still has some features to be added. The "to do" list of the program looks very exciting.

For details, see <http://en.os2.org/projects/indos2>

Matrox video driver

Matrox released V2.31.100 of their video card driver. It seems to fix some problems related to HomePage Publisher. You can get it at www.matrox.com/mga/drivers/latest_drivers/home.htm or [ftp://ftp.matrox.com/pub/mga/unified/os2/os2_231.zip](http://ftp.matrox.com/pub/mga/unified/os2/os2_231.zip)

Driver update at Realtek

Realtek is one of the largest manufacturer of network chipsets in the world. They have updated most of their network drivers. Everything from 10Mbps to 100Mbps seems to have some update. Recent communication with Realtek personnel indicates that they will pack non-Windows drivers with ZIP instead of self extracting Win-RAR archive. In the mean time, you should be able to use RAR to unpack the driver.

The drivers are at www.realtek.com.tw/cn/cn.html.

Fujitsu GigaMO support

Fujitsu released their latest magneto optical (MO) drive, with OS/2 driver support. It allows OS/2 to use the nearly invulnerable MO disks for safe data storage. Also, it should be possible to use HPFS with OS/2's built-in removable disk support and the N512DASD.FLT filter driver. I'd love to hear from anyone who has experience with the GigaMO and OS/2 HPFS.

The driver is available at [www.Fujitsu-Europe.com/home/support/mo/software/cat5os2\(v300\).ZIP](http://www.Fujitsu-Europe.com/home/support/mo/software/cat5os2(v300).ZIP)

I2O SCSI driver

IBM released an I2O Storage and Transport Device Driver that allows the OS/2 hard drive manager to communicate with SCSI storage devices using the Intelligent I/O (I2O) Architectural Specification.

Get it at <http://service.software.ibm.com/os2ddpk/htm/diskands/ibmi2osc/index.htm>

Network device driver update

There's been an updating and addition spree in IBM's DDPak Network Adaptor section. I saw over 100 new additions and over 20 updates. I don't think I have the

room to describe every one of them here.

Find it at: <http://service.software.ibm.com/os2ddpак/html/lanadapv/index.htm>
PCMCIA LAN devices: <http://service.software.ibm.com/os2ddpак/html/pcmciala/index.htm>

PCMCIA fax/modem

DDPak have some newly available driver for PCMCIA Fax/Modems from IBM, Oilcom and Xircom. Some models from all three manufacturers have both fax/modem and Ethernet capability built-in. Food for thought when you are shopping for a notebook.

It's at <http://service.software.ibm.com/os2ddpак/html/pcmciala/index.htm>

Iomega's Zip 250MB

IBM added beta support for Iomega's Zip 250MB. This driver is in beta status, so you use it at your own risk. <http://service.software.ibm.com/os2ddpак/html/removabl/iomega/index.htm>

Updated printer drivers

IBM again updated its jack-of-all-trades OMNI and PostScript drivers. They seem to have added a few more printers to the "supported" list.

You can download the files at
<ftp://ftp.software.ibm.com/ps/products/os2/os2ddpак/omni.exe> or <ftp://ftp.software.ibm.com/ps/products/os2/os2ddpак/pscript.exe>

THE OS/2 SUPERSITE

<http://www.os2ss.com>

- Over 2 gigabytes of OS/2 shareware and freeware
- Mailing lists such as OS2USER and WarpCast
- Home of several popular OS/2 web sites such as OS/2 e-Zine!, EDM/2, OS/2 Connect, Loren Bandiera's OS/2 News and Rumors Page, and Timur Tabi's New OS/2 User page.
- The OS/2 Discussion Forum
- Online shareware registration and commercial software purchasing

Join the Supersite Members Club

Club members get special deals on commercial software and \$2.50 off every shareware application they register through BMT Micro. Members also get FTP access to the Supersite archive and space for their personal web page. See <http://www.os2ss.com/club/> for details.

Drag me, drop me, edit me

Using drag and drop in the Enhanced Editor

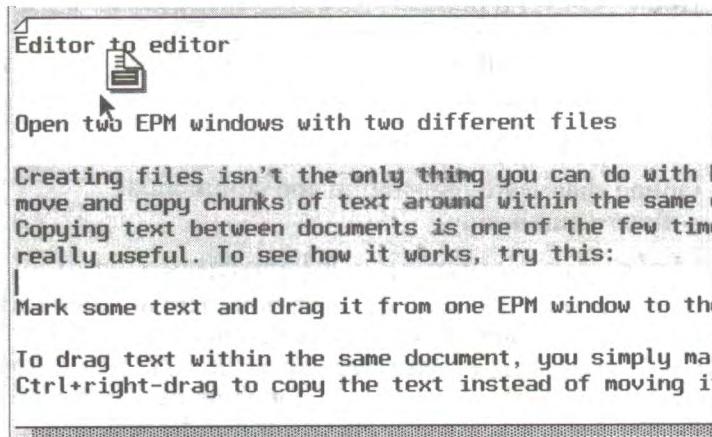
by Bill Schindler

I have access to systems running OS/2 Warp, Mac OS 8.6, Windows 95, Windows NT, and Linux. Without question, the operating system with the best desktop and cross-application drag-and-drop support is OS/2.

So, it should be no surprise that OS/2's Enhanced Editor (EPM) has some fairly advanced drag-and-drop features. In fact, EPM has so much support for drag-and-drop that this entire article is dedicated to it.

First, if you missed last month's article on EPM basics ("Enhancing your life," October 1999), go back and read it. You'll need to know the basics before diving into this article.

Second, if you're still running EPM 5.x, upgrade. Go to Hobbes and download EPM 6.03b at <ftp://hobbes.nmsu.edu/pub/os2/apps/editors/epm/epmapp.zip>. All of the directions in this article assume that you're using EPM 6.03b.



Drag and edit

The most straightforward use of drag-and-drop is to edit a file. You don't need to press F8 and drill down through directories. You don't need to start a shell and use Alt+F1. Just grab a file from a folder and drop it on the editor.

This works best when you need to edit your way through several files in one or two folders. Here's how you do it:

- Start EPM
 - Open the folder containing the files you want to edit
 - Put the mouse pointer over a file icon
 - Press and hold the right mouse button
 - Drag the file over EPM's edit area
 - Release the right mouse button to drop the file
- The file should almost instantly open in EPM.

The default behavior is for EPM to open each dropped file separately in the edit ring. You can change the default so that the dropped file is imported instead. To change the default:

- Open EPM's settings notebook by selecting **File, Settings....**
- Select the **Window** tab
- Near the bottom of the notebook page, you'll see "Dropping file"
- Click on "Imports" (or "Edits," depending on which way you want it set)
- Close the notebook

Now, when you drop a file on the edit window, EPM will import it into the file in the current edit window. The file is inserted at the current cursor location, so make sure you set the location before doing the drag-and-drop.

Setting the default to import the file offers you the most flexibility. With the default set to import, you can import the file by dropping it in the edit window or you can open the file by dropping it on EPM's titlebar.

Edit and drag

Sometimes, when you're editing a file, you want to save a copy under a different name. You may just want a backup snapshot of the file, or you may be creating different versions. In either case, it's troublesome to go to the command line to make a copy (did you remember to save first?). Instead, you can use a quick drag-and-drop.

There are two ways to create copies of the current file in EPM using drag-and-drop. The obvious method is:

- Select everything in the edit window (**Edit, Select all** or **Ctrl+A**)
- Put the mouse pointer over the selected text
- Press and hold the right mouse button
- Drag to the desktop or a folder



There's a simpler—but not as obvious—method. Look at EPM's titlebar. On the left side, you'll see two icons. The left-most icon is the application icon. To the immediate right of that, there's an icon of a page with the upper right corner folded. This icon is called the "file icon." Try this:

- Put the mouse pointer over the file icon
- Press and hold the right mouse button
- Drag to the desktop or a folder

You just created a copy of the file without having to perform the selection step.



Using either method produces a file with a generated name, like 5100863.tmp. If you'd like something a little more meaningful, just edit it in place (use Alt+left-click on the file name and change it).

Bits and pieces

Instead of copying an entire file, you may just want to turn a chunk of text into a stand alone file. To do that, you just mark the text and then drag it off.

Drag-and-drop works with all of the different marking styles: line, character, and block.

The block mark can be used to do some especially interesting things. For example, open a shell in EPM and type `dir` to get a directory listing. Block mark the file names and then drag it off to a file. In a couple seconds, you've created a list of files that would have been tedious to type in by hand.

Editor to editor

Creating files isn't the only thing you can do with EPM's drag-and-drop. You can also move and copy chunks of text around within the same document or between documents.

Copying text between documents is one of the few times that EPM's **Open new**

window is really useful. To see how it works, try this:

- Open two EPM windows with two different files
- Mark some text and drag it from one EPM window to the other

To drag text within the same document, you simply mark it and drag it. Use Ctrl+right-drag to copy the text instead of moving it.

Another thing you can do with drag-and-drop is print. To print part of a file, mark what you want to print and then drag it to the printer icon. To print the entire file, drag the file icon (the icon on the left side of the titlebar) to the printer.

Toolbar

You can rearrange the buttons on EPM's toolbar using drag-and-drop. Put the mouse pointer over a toolbar button, press and hold the right mouse button, and drag the toolbar button its new location.

If you want to keep your changes, right-click on the toolbar and select **Save as...** from the pop-up menu.

Other applications

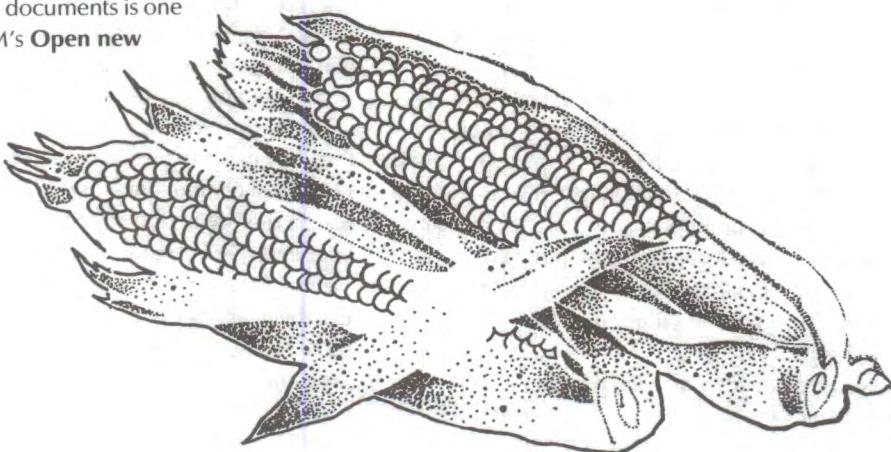
EPM's drag-and-drop integrates nicely with other applications that support drag-and-drop.

For example, you can drag a name and address from Relish's address book and drop it into EPM. You can drag text from EPM into a label in Smack! (but not the other way around). You can drop entire files from EPM into a PMMail email attachment.

Experimentation is often the best way of determining how much drag-and-drop support is available in an application. Try dragging to and from various areas in the application.

Drop

If you've followed along and tried doing most of these operations, you should have a good grasp of the various ways you can use drag-and-drop in EPM. You may, in fact, find that you're now considered an EPM wizard by most other OS/2 users! ☺



Migrating an OS/2 application to Java

by John Wubbel

Sometimes, when I speak with friends, I am accused of abandoning OS/2 because I'm writing a Java program or migrating an OS/2 program to Java.

As an avid OS/2 developer, that accusation is hard to take. I have good reasons for doing Java. The include some of the same reasons I had, years ago, for choosing OS/2. Sometimes, being practical dictates the decision to write in Java. For example, you might try to decide whether writing a database utility is better in REXX or in Java. Each has its advantages. It might depend on your available resources or programming experience. A C++ programmer might pick up Java faster than REXX, depending on experience.

There's a lot of hype about Java and why you should "write once run anywhere." I like the notion that I can offer a product that will run on other operating systems such as Linux. (Linux is appealing to me because it doesn't have a large corporate entity behind its current success. With companies like IBM falling all over themselves to support Linux, it's becoming more interesting as a general use platform.) But—ignoring the hype—there is often more to think about when you're rewriting a OS/2 application.

From my programmer's perspective, I don't worry about the market implications, nor what my accusers think. Instead, I focus on the fundamental technical issues in rewriting an OS/2 application in Java. As usual, I start out by doing some minor analysis work before jumping to the task. This involves listing and comparing equivalent functionality between the native platform and the Java environment.

Planning the port

First, review the code in your OS/2 program. List all the capabilities you have utilized. Look for things like WM_TIMER, semaphores, threads, interprocess communication features, pipes, queues, and shared memory. Examine the data structures and note the outstanding user interface features incorporated into your design.

Next, survey the Java environment, the programming language, and the AWT or Swing, to find comparable features to the list you made of your OS/2 program. You need to understand which features in Java are similar to those in your OS/2 program. Your purpose, here, is to understand what challenges you will face during the program rewrite. For example, if your OS/2 application has a container with icons, does Java give you the same capability?

This process might be incremental because, to prove feasibility, you may need to develop a small prototype to prove the idea. Since you are not porting code as such, the logic within your functions should not change. You should

be able to reuse most of it. Your original design will not change—only its implementation will be reworked.

Hidden advantages

Some advantages do not become evident right away. For example, in an OS/2 program accessing DB2 using embedded SQL, a bind file is created by the SQL preprocessor. In Java, you use JDBC to perform SQL statements, and there is no requirement to bind access plans to the database. The JDBC layer accesses the database through the Client Level Interface (CLI) on the DB2 JDBC product. The OS/2 program may use APIs for logging on, starting the database, and making the connection to begin using the database. Starting and initializing the application requires more up-front time. I have found that by comparing basic embedded SQL operations in the native program with those same operations in a Java program, the performance is satisfactory. In a Java program, the very first SQL operation following the completion of the connection seems to take the longest to complete. Subsequent operations run considerably faster. Closing the connection only to reopen it later causes latency on the next SQL operation once again. This may be an drawback for some applications.

As Java has matured, Java programmers have gained more support for graphical user interface features like drag and drop, timers, and the clipboard. This makes the rewrite job easier, because you don't have to write workarounds. However, some advanced features are still missing. So, the simpler the user interface of the native OS/2 program, the easier it will be for you to keep the same look and feel in the Java version.

As you rewrite the application, you will notice a reduction in the number of lines of code—particularly if you are moving from a procedural implementation to Java's object oriented paradigm. Assuming you are an accomplished Java programmer, another advantage of writing in Java is you will spend less time using a debugger. This leaves you with more time to do creative work.

A strategic advantage of writing small programs in Java is that they can enhance your native OS/2 application as a peripheral component. I find favor with this idea because I have a distaste for integrated applications. If you analyze your end user base, there are always small groups of people that have unique requirements. Why integrate email capability just because a handful of people need to store the customer's email messages in the database? An email program can look as though it is part of the main program, while remaining independent—yet still give the user the ability to store the mail message. Some newer function I

plan to add to a OS/2 application is prototyped. Some of this code I always consider as candidate material to rewrite in Java where practical.

Database utilities are handy as well. While DB2 runs on almost every popular platform these days, REXX may not reside on a target system. If you simply want to add a couple of tables to an existing database, a Java program can do the job without any user interface required. If you write the tool in REXX, your customers may need to install REXX on their system before using it. I might be speculating, but I think commercial customers are more likely to have Java on their systems.

While I really enjoyed the use of shared memory as a programming capability in OS/2, I do not miss it. The same results can be achieved using classes and managing the privilege of use by controlling the public or private access to data. I think the use of threads and perhaps semaphores are a little more discomforting when coming from native programming because you get so used to the APIs and now we have to internalize the Java implementations of these ideas. I almost cannot live without timers though. Fortunately, with Swing, a Timer class does the trick. If you really do miss the function of an API, you can always write a class to simulate the task.

The down-side

The things that cause delays are usually not due to a lack of Java programming experience, but the lack of quality documentation. For example, when porting a SQL command to JDBC, data types may give you a headache.

TIMESTAMP, for instance, looks very straight forward. My initial attempt to implement it didn't work. I searched for some sample code and documentation, but found it sketchy at best. Working from the limited documentation, I had to write a small test case to find the correct way to accomplish what I wanted. Once I got it to run, it became obvious. I am sure it is per-

fectly obvious to the fellows who implemented the JDBC, but it doesn't help when they do a lousy job of documenting it.

IBM's sample code is usually too simple to be of use—it makes you wonder if their developers have ever written a complex mission critical application. (See figure 1 for a code snippet dealing with TIMESTAMP.)

```
try
{
    con.setAutoCommit(false);
    insertStmt = con.prepareStatement("INSERT INTO CUSTOMER_TABLE" +
        " (customer_name, t_and_d_stamp) VALUES(?,?)");

    dateStamp = new DosGetDateTime();
    long l = dateStamp.rtnDateTimeInMilliseconds();
    Timestamp ts = new Timestamp(l);
    l = ts.getNanos() / 1000000;

    String tdStr = ts.toString() + l;

    insertStmt.setString(1, tf[0].getText()); /* tfCustomerName */
    insertStmt.setTimestamp(2, ts.valueOf(tdStr)); /* TIMESTAMP */

    insertStmt.executeUpdate();

    SQLWarning warning = insertStmt.getWarnings();
    if (warning != null)
    {
        debug.out("Message: " + warning.getMessage());
        debug.out("SQLState: " + warning.getSQLState());
        debug.out("ErrorCode: " + warning.getErrorCode());
    }
    debug.out("commit:");
    con.commit();
    con.setAutoCommit(true);
    insertStmt.close();
} catch( SQLException e )
{
    debug.out("Insert into Customer_Table failed.");
    debug.out("Message: " + e.getMessage());
    debug.out("SQLState: " + e.getSQLState());
    debug.out("ErrorCode: " + e.getErrorCode());
}
```

Night Vision

by Craig Greenwood

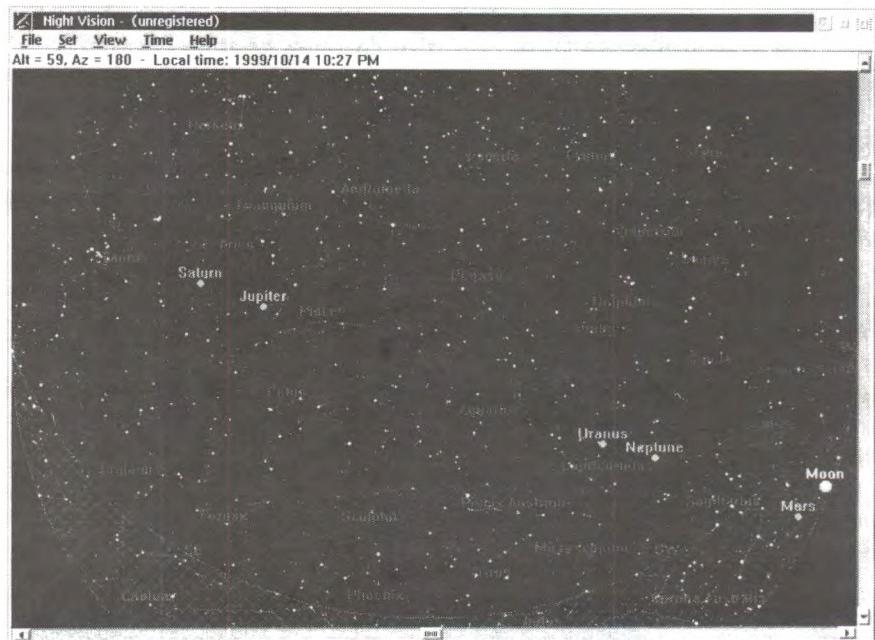


Night Vision is a planetarium program for OS/2 that displays the sky on your screen, simulating the sky at the location that you set it for. It updates every minute (or other chosen interval) to keep the display current. You can accelerate the movement, or even run it backwards. Shown are: stars, planets, the Moon and Sun, as well as constellations and deep sky objects such as nebula, clusters, and galaxies.

The program installs very simply—the only effort I needed initially was to look up my local coordinates for latitude and longitude, and to calculate my time zone (a bit tricky for Arizona which doesn't switch to daylight savings time with most of the rest of the country). Some major cities can be selected from a provided list, but Phoenix is not one of them.

I found this program to be fascinating; partially due to its subject matter, and partly due to its usability. It is very mouse aware: left clicking anywhere brings that spot to the center of the screen, dragging a rectangle with the left button zooms the defined area and centers it, right clicking on an object brings up a menu which has an option to "identify." When "identify" is chosen, a window appears with specific information about the body in question: name, type, magnitude, location, and even distance from the previous object identified.

Menu options and keyboard shortcuts enable you to do a variety of useful things. For example: you can set the magnitude of the stars to be shown, zoom in and out, configure what is to be displayed and how it is labeled. Of special note is Night Vision's ability to search for a particular constellation, star, deep space object, or object within our own solar system. By picking an item off of a category list, the object is brought to the center of the map or highlighted with an arrow. These lists are rather com-



prehensive. There are 89 constellations listed, 179 stars, and 184 deep sky objects.

Our family went camping this fall in the mountains about 200 miles north of Phoenix—up where you can really see the stars. To prepare for the trip, I set the Night Vision coordinates for the region where we would be staying. Then I set the time for when we would be out stargazing, and printed out the resultant star chart. This was a tremendous asset in helping us find constellations, planets, and other heavenly bodies to view with a telescope as well as the naked eye.

The registration fee of \$25 may be a bit steep for the casual user. But if you enjoy stargazing, with or without a telescope, this is a very useful tool that can make night time outings more productive and enjoyable. ☺

Hewlett-Packard Official Scanner Handbook

by Mike Willmoth

I recently was given the opportunity to review this book for extended attributes and thought I'd probably learn a few things I didn't already know about scanners.

Now I'm not an expert by any means. I could be classified as an intermediate beginner or a beginning intermediate. However, in reading the first half of the book I found a lot of information that I didn't know. It might be too much for a beginner and perhaps boring for an expert, but so far it's just right for someone who has some experience with scanners. I'm looking forward to reading the

I'm easily amused.) When is the best time to use GIF vs. JPEG? How can you calibrate your monitor/printer/scanner system? It's all discussed in the book.

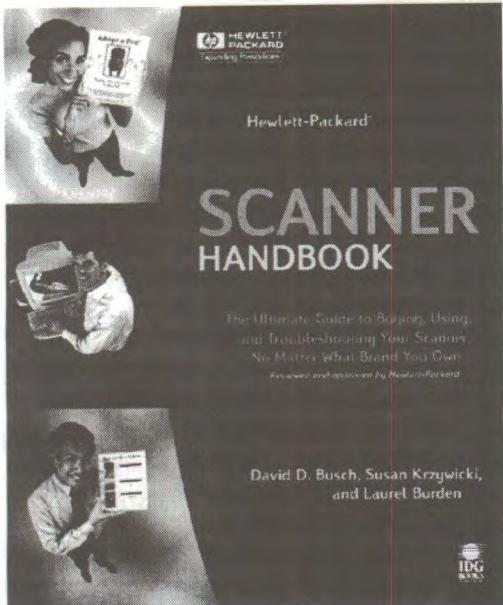
The authors also bring up the variables in scanning successfully: best original, scanner controls, sizing and scaling, etc. The chapter on image editing seemed a little long, considering all the various software tools mentioned (such as Adobe Photoshop, PhotoImpact, and Paint Shop Pro -- none of which is an OS/2 application) and a few details on how to use them. I was able to skim through this section rather quickly, as I have few of these applications installed on my machine. The final chapter I read covered troubleshooting your scanner, not only hardware problems and solutions but also the software installed and drivers used.

Much of the discussion in the book referenced Hewlett-Packard (HP) scanners and software as examples, since they seem to be the market leader in affordable scanners. I have had previous experience with an HP ScanJet and DeskScan II software, so I was able to understand their examples pretty well. Photoshop was the main product referenced for manipulating images, but it's similar enough to the Corel PhotoPaint that I have that I could follow along.

For operating systems, OS/2 wasn't mentioned at all; Windows 95/98 and Mac were the primary OS examples, and Windows 3.1 came up in the troubleshooting chapter. The only annoying error I spotted involved a reference to milliamperes as power rather than current, but for anyone who didn't study electronics in school it would probably just fly right by. One other thing distracted me from my reading. Although the authors covered GIF and JPEG, and what they stand for, there were a couple of references to PNG without introductory details. I was forced to look at the glossary for a definition (which I already knew, but a novice wouldn't).

Overall, I think this is a good book. If you have access to a discount warehouse, such as Costco or Sam's Club, you may find it there in the computer section of the book piles at a significant discount. Otherwise, I'm sure the online/offline bookstores carry it. If you have lots of experience in the computer graphics industry, then you may find this book less filling. If, on the other hand, you're just starting out and want to understand all the different things you'll need to get started, it should taste great.

For me, having just crashed through four chapters in one evening, I think it's Miller time. ☺



second half in the coming month.

The book is published by IDG Books Worldwide, Inc. and is copyrighted 1999, so it's rather up-to-date and comes in softcover.

There are two parts to the book. Part I is on Using Scanners, and Part II covers Scanner Projects. The book starts out by discussing the basics: what is a scanner, what types of scanners exist, characteristics (size, resolution, etc.), and hardware requirements to run one. Next comes how scanners work, their evolution and history, resolution concepts, color depth and types of artwork, such as line art and grayscale. From here, the text gets into installation of the hard-

ware and software. It moves on to discuss the resolution required for line art versus photos versus optical character recognition (OCR), interpolation and sharpening, grayscale and halftones. I didn't know much about halftones, so this part helped me understand how much I didn't know.

When the authors talked about color (additive, subtractive, etc.) I rediscovered some of what I had learned earlier in my career, but also picked up some additional knowledge. Why do web browsers have a 216 color palette? That's such a strange number! Well, it seems that if you remove the 40 colors reserved for the systems to display boxes and windows from 256, you get 216! (Sometimes

Hewlett-Packard Official Scanner Handbook

\$19.99

by David D. Busch, Susan Krzywicki, and Laurel Burden

ISBN 0-7645-3304-5

New and improved

compiled by Esther Schindler

In the general world of computing, vendors often time their significant new product announcements for November's Fall Comdex show in Las Vegas. There seems to be a growing tendency for OS/2 developers to release new applications in time for Warpstock, which will be over by the time you read this.

ASTRAC Visualizer PE

Visualizer is a data query and analysis tool, which features:

- DB2/2 database folder on the desktop
- Data Query based on SQL
- Data Query if you don't like SQL
- Many data sources apart from DB2/2
- Data update by direct entry into Table and Form views
- Data presentation as tables, charts, and reports
- Statistical analysis

Visualizer includes an application development environment, so that you can build your own applications which can, if appropriate, combine any or all of the above with whatever processing is required.

Visualizer Personal Edition (\$97) is a fully-functional edition of Visualizer, with a few limitations. The only supported data sources are DB2/2 Personal Edition, Visualizer tables, and files in formats such as IXF and CSV. Plus, in the personal edition, applications and tables cannot be run from network drives.

The Visualizer web site is www.astrac.com. To upgrade from the personal to the full product, you will need a new license key, and the VISEXTRA annual support package.

SecureDesktop

SecureDesktop, a security system for OS/2, is now available in both English and German. SecureDesktop (SD) is based on IBM's SES (Security Enabling Services) which must also be installed.

A password protected serial multiuser desktop is ready now. Additional modules, currently under construction, include file access control, network access control: single-sign-on for Lan-Server/Peer networks and TCP/IP, and distributed WPS.

For more information or to order, contact Juergen Dankowheit (Juergen.Dankowheit@t-online.de) or visit www.geocities.com/SiliconValley/Way/3792.

Styler/2

Styler/2 0.99, previously known as Smart Windows, is a user interface enhancer for OS/2 Warp 3 and 4. You can download it from <ftp://hobbes.nmsu.edu/pub/new/smw099.zip> or <ftp://ftp.ghostbbs.cx/smws099.zip>.

bbs.cx/pub/os2/os2team/a1cant/smws099.zip. You can also contact the author at Alessandro Cantatore aless-cant@tin.it, <http://acsoft.ghostbbs.cx>.

AnyJ for OS/2 preview

AnyJ is a cross-platform Java IDE and source code engineering solution. AnyJ supports several kinds of Java applications.

AnyJ includes various browsers and analyzing tools, a Java Beans compliant Visual GUI-Builder (JFC, Swing), a source level debugger, integrated version control, and an editor. You can find it at www.netcomputing.de, or contact the author, Paulo Dias, pcd@wwd.ppg.br.

Sorry Biscuit Utilities

What can I say? I like the name and the attitude. Sorry Biscuit Software freeware OS/2 utilities are now available at wwwdimensional.com/~serls/sorbis.html. Sorry Biscuit is the home of POFAMU, a PMMail Folder Maintenance Utility, "as well as other, even less significant, cyber-clutter," reports Dave Serls, serls@dashes.denver.co.us.

Fortify 1.4.5

Fortify for Netscape released v1.4.5 for OS/2, which includes support for Communicator 4.61. Fortify for Netscape is a program that provides 128-bit cryptography to users of Netscape Navigator (v3 and v4) and Communicator (v4). It's suitable for you if you routinely use Netscape's export-grade Web browsers, (i.e. the ones you can download from the Internet). It can be found at www.fortify.net.

ICQ/2 PM for OS/2

ICQ/2 is a ICQ client for OS/2 that provides a full 32 bit multithreaded OS/2 PM application, without the complexity of IRC and the limitations of other chat tools. ICQ/2 lets you find friends or colleagues online and exchange messages or chat with them in real time all the while letting you see who's online at a glance. Its compatibility with any other operating system's ICQ software clients allows you to both send and receive messages or chat with any of your friends, coworkers or colleagues.

ICQ/2's display lets you know whether your pals are on or offline and what their status is: Available, Do Not Disturb, or Away. Adding new friends is easy: a wizard searches ICQ's database by name, email address, and ICQ number. Font styles and text and background colors can be changed by drag-and-drop from the desktop. ICQ/2 supports direct and server side messaging, unlimited text in

messages, and built-in message and chat logging. It has auto authorization for new users to contact list, Internet IP detection, and ICQ sound events. ICQ/2 PM is in public beta, right now, at <http://members.home.com/momotek/icq2/index.html>.

Netwatch 2.0 for OS/2

Netwatch is a Presentation Manager application that allows you to monitor and log your network connection and or remote network IPs.

It's currently available for free download at <http://members.home.com/momotek/netwatch/index.html>.

Biograph/2

Biograph/2 is the ultimate biorhythm program for OS/2 Warp.

It tells you about the physical, emotional, intellectual and intuitional biorhythm and allows for displaying multiple biorhythm charts and pair matching. The scientifically approved biorhythm method provides a unique possibility to know how you might be feeling tomorrow—an invaluable tool for those who are sensitive for those subtle biological influences.

More information can be found at www.geocities.com/rodeodrive/2048/eindex.html in the "Software" submenu.

PM Viewer VNC

The PM-Viewer VNC Ver 1.0 has been released. (VNC stands for Virtual Network

Computing.) Find it at www.sra.co.jp/people/akira/os2/vnc-pm/index.html.

Hot Corners

Hot Corners is a PM utility which allows you to bring foreground applications found in the Window List or to start objects by using your screen corners and borders.

Windows found in the Window List can be brought to the mouse pointer position, once activated. They can be minimized or pushed back in the Z order once the mouse pointer leaves their frame as well. Moreover, each corner and border have different activation combinations using mouse buttons, Alt, Ctrl, and Shift. Other options let you set the time-out delay before activation, and the corner margin. You can make windows float on top or on bottom.

Hot Corners 2.2, by Samuel Audet (guardia@cam.org), is available at www.cam.org/~guardia/programs.html; it's free.

PPWizard

PPWizard is a free preprocessor which can handle any text file types but is most frequently used for HTML and REXX development.

The main change in this new version is the new URL checker, which checks ftp and http URLs. It works integrated with PPWizard or as a standalone program. It can ensure that no external links are broken, and will tell you when pages move. Among

its options are the ability to test only a few of your links. The program also has a spell check capability.

The PPWSORT.H header file in PPWizard provides a radical but very powerful alternative example of how REXX code can be generated. The header allows sorting of 1 to "x" REXX arrays (to keep associated data together) using 1 to "n" keys and sorting any way you wish. The program also provides generic nesting validation support, enabling you to ensure that you have a close tag for every open tag. For more details, see www.labyrinth.net.au/~dabreis/ppwizard.htm. The Web site was built using PPWizard, as was PPWizard and its IPF and HTML documentation.

Escape GL V3

Snow Storm Software released Escape GL V3, a screen saver for OS/2 Warp and Windows 9x/NT. It incorporates new OpenGL 3D modules including M&M's, concentrics, snowfalls, improved VRML support, new frames per second monitor, new world archives, improved performance, and improved stability. Escape GL V3 is simply one of the hottest 3D OpenGL Screen Savers.

Exclusive to Escape GL is world archive support, allowing new modules to be added and utilized faster and easier. These archives incorporate all necessary files, along with additional descriptive information in one tiny package. In addition, these

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additional modules will be platform independent for all V3+ users. Watch for additional modules at www.snowstormsoftware.com/gallery.html

Escape GL V3 is \$29.99 for a single user. An upgrade from V2 costs \$14.99. It's available from the Snow Storm Software Web site at www.snowstormsoftware.com.

World Clock 1.0

World Clock is a freeware, configurable

clock with Daylight Savings Time, stopwatch, alarm, program launcher, and calendar for up to nine cities. You can choose from more than 400 cities in the provided city list. To download World Clock 1.00, visit http://members.tripod.com/~Goran_Ivankovic/

include support for more image formats, significant user interface enhancements, and a Windows version. PMView sports a new look, with a toolbar and a new file-open dialog box. For more information, see www.pmview.com. ☀

PMView 2.0

PMView 2.0 is scheduled for release at Warpstock in Atlanta. It's promised to

Y2K Deadline Approaches

SBA Administrator offers help for small businesses

press release

With the Y2K deadline just 100 days away, Aida Alvarez, the head of the U.S. Small Business Administration (SBA), today urged the nation's small business owners to act now to ensure that their computer hardware and software is Y2K-compliant.

"The clock is ticking louder, but SBA is here to help," Administrator Alvarez said. "We have core teams in every state offering technical assistance to small businesses. Over the next three months, we have scheduled nearly 600 training events around the country on planning and responding to Y2K issues," she said. "In addition, we offer Y2K Action Loans for businesses that need financial assistance to address the problem. In many cases, the solution could be a simple hardware upgrade costing about \$1,000."

A recent study by the National Federation of Independent Business estimated that 28 percent of small businesses have not taken corrective action regarding Y2K problems. They tend to be located in rural areas and are among the smallest and least dependent upon computers for day-to-day operations.

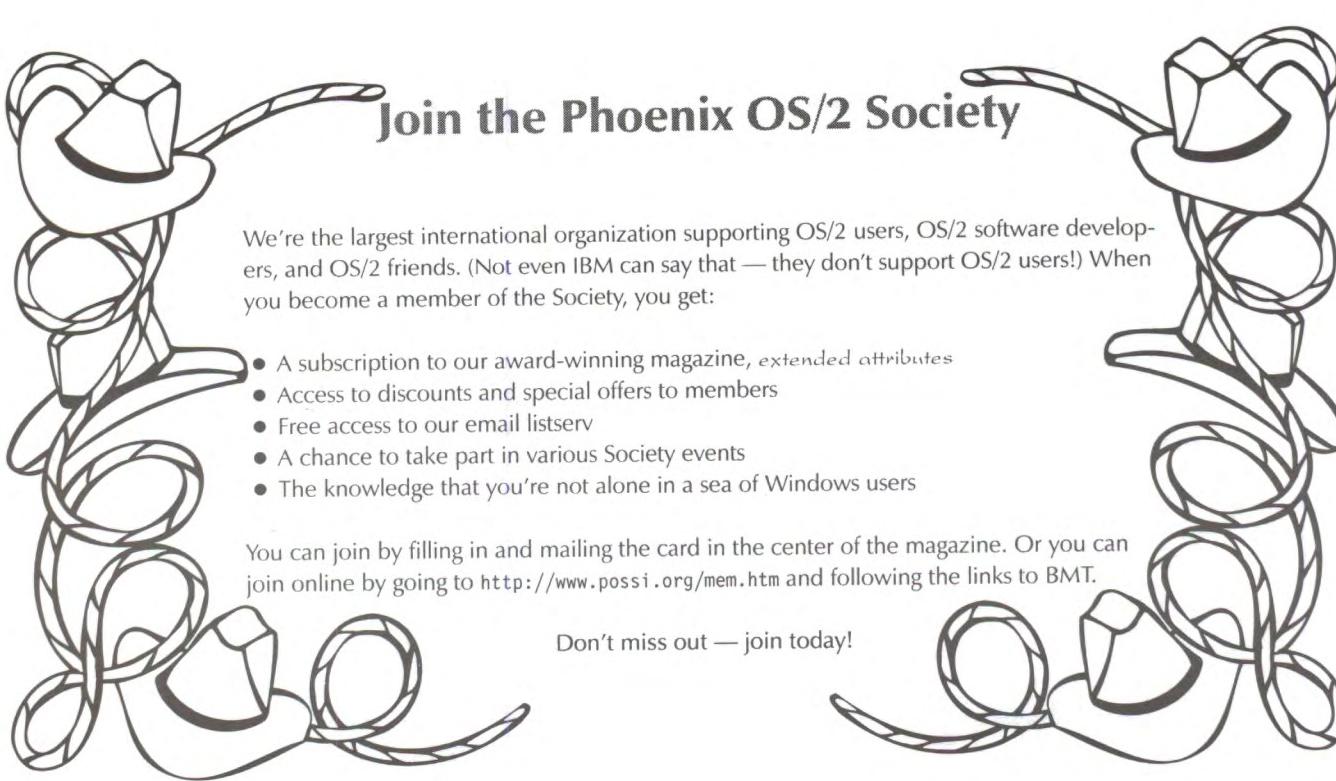
As national concern about potential Y2K problems grew, SBA was challenged to reach small businesses with sound information in a short time frame. SBA launched its Year 2000 web site—accessible through www.sba.gov—in February 1998. The web site is the central resource for

small businesses and offers specific "how-to" information on diagnostic and corrective measures. To date, more than 1,000 small businesses have had their questions answered through the site's email box.

Other SBA information outreach efforts include a toll-free telephone Answer Desk (1-800-U-ASK-SBA), and a SBA Y2K fax-back system (1-877-R-U-Y2K-OK).

The SBA works with other federal agencies, including the U.S. Departments of Agriculture and Commerce, and 57 Small Business Development Centers (SBDCs) and their more than 1,000 satellite centers across the country, to provide Y2K technical assistance to small business entrepreneurs. To date, SBA and its resource partners have held more than 1,150 Y2K educational activities and have reached approximately 1.2 million small businesses.

"Now is not the time for wait-and-see," said Alvarez. "We can't eliminate Y2K disruptions, but we can minimize them, but only if the nation, and the small business community in particular, takes the challenge seriously and begins to act now." ☀



Join the Phoenix OS/2 Society

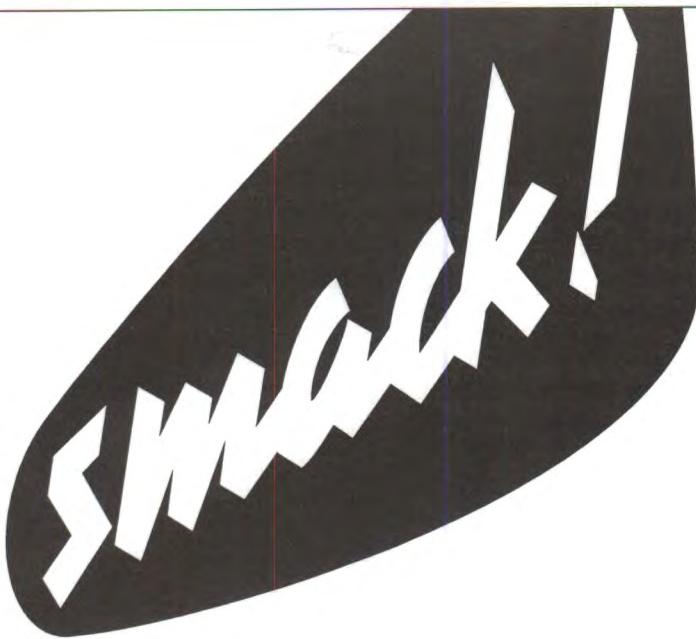
We're the largest international organization supporting OS/2 users, OS/2 software developers, and OS/2 friends. (Not even IBM can say that — they don't support OS/2 users!) When you become a member of the Society, you get:

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- Access to discounts and special offers to members
- Free access to our email listserv
- A chance to take part in various Society events
- The knowledge that you're not alone in a sea of Windows users

You can join by filling in and mailing the card in the center of the magazine. Or you can join online by going to <http://www.possi.org/mem.htm> and following the links to BMT.

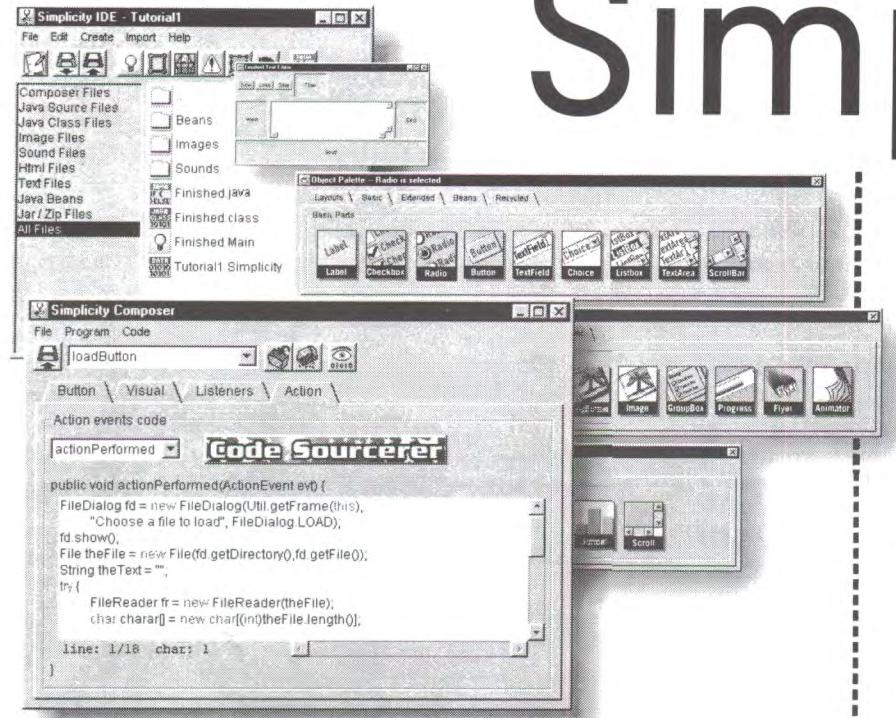
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